

FIG.1

USER INFORMATION

MEMBER ID	PASSWORD	USER ATTRIBUTES	INFORMATION OUTPUT PERMISSION
A	1111	NAME, ADDRESS, SEX, OCCUPATION, ETC.	YES
B	2222	...	NO
⋮	⋮	⋮	⋮

FIG.2

Parameter	Value	Unit
Initial concentration	1.0	g/L
Initial pH	7.0	
Temperature	25	°C
Time	0-120	min
Agitation speed	150	rpm
Batch size	100	mL
Adsorbent dose	0.1-1.0	g/L
Adsorption capacity	0.1-1.0	g/g
Desorption efficiency	0.1-1.0	%
Regeneration cycles	1-5	
Recovery percentage	0.1-1.0	%
Stability	0.1-1.0	%
Reproducibility	0.1-1.0	%
Cost-effectiveness	0.1-1.0	%
Environmental impact	0.1-1.0	%
Scalability	0.1-1.0	%
Overall performance	0.1-1.0	%

**FIG.3A**

## FIG.3B

PORT	MEMBER ID	IP ADDRESS	CONNECTION START TIME	CONNECTION END TIME
1	A	X.X.X.10	09:04	09:04
⋮	⋮	⋮	⋮	⋮
4	B	X.X.X.10	09:23	—
⋮	⋮	⋮	⋮	⋮

IP ADDRESS-URL ACCESS INFORMATION

IP ADDRESS	URL ACCESSED	CONNECTION REQUEST TIME
x.x.x.10	www URL com (URL 1)	09 : 05
x.x.x.10	www URL2 com (URL 2)	09 : 5
x.x.x.10	www URL3 com (URL 3)	09 : 7
x.x.x.10	www URL4 com (URL4)	09 : 25
⋮	⋮	⋮

FIG.4

USER-URL ACCESS INFORMATION

MEMBER ID	URL ACCESSED
A	URL 1
A	URL 2
A	URL 3
B	URL 4
⋮	⋮

FIG.5



URL	CATEGORY	SUB-CATEGORY
URL 1	ART	PHOTOGRAPHS
URL 2	BUSINESS	EMPLOYMENT
URL 3	POLITICS	PUBLIC ADMINISTRATION
URL 4	SPORTS	OUTDOOR
⋮	⋮	⋮

FIG.7

RESULTS OF THE USER PREFERENCE ANALYSIS

CATEGORY MEMBER ID	ART	BUSINESS	COMPUTER	EDUCATION	...
A	5 <sub>̄</sub>	2 <sub>̄</sub>	0 <sub>̄</sub>	0 <sub>̄</sub>	...
B	0 <sub>̄</sub>	0 <sub>̄</sub>	5 <sub>̄</sub>	4 <sub>̄</sub>	...
⋮	⋮	⋮	⋮	⋮	

FIG.8

CONTENT INFORMATION

CONTENT ID	CATEGORY	SUB-CATEGORY	AGE	SEX	OCCUPATION CODE
0001	ART	PHOTOGRAPHY	20 - 40	M	1
:	:	:	:	:	:
0012	EDUCATION	SCHOOLS	12 - 15	F	0
:	:	:	:	:	:

FIG.9



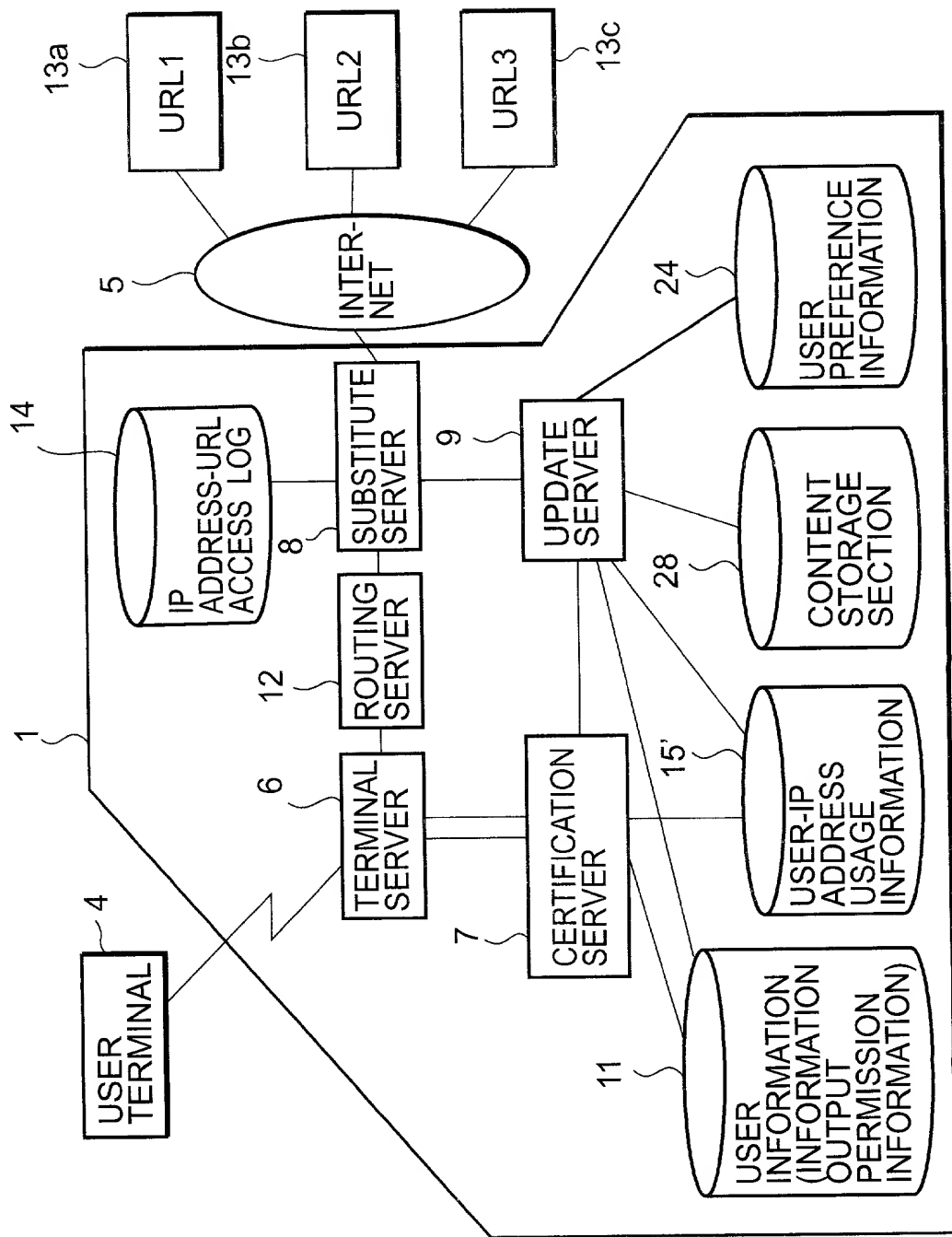


FIG.10



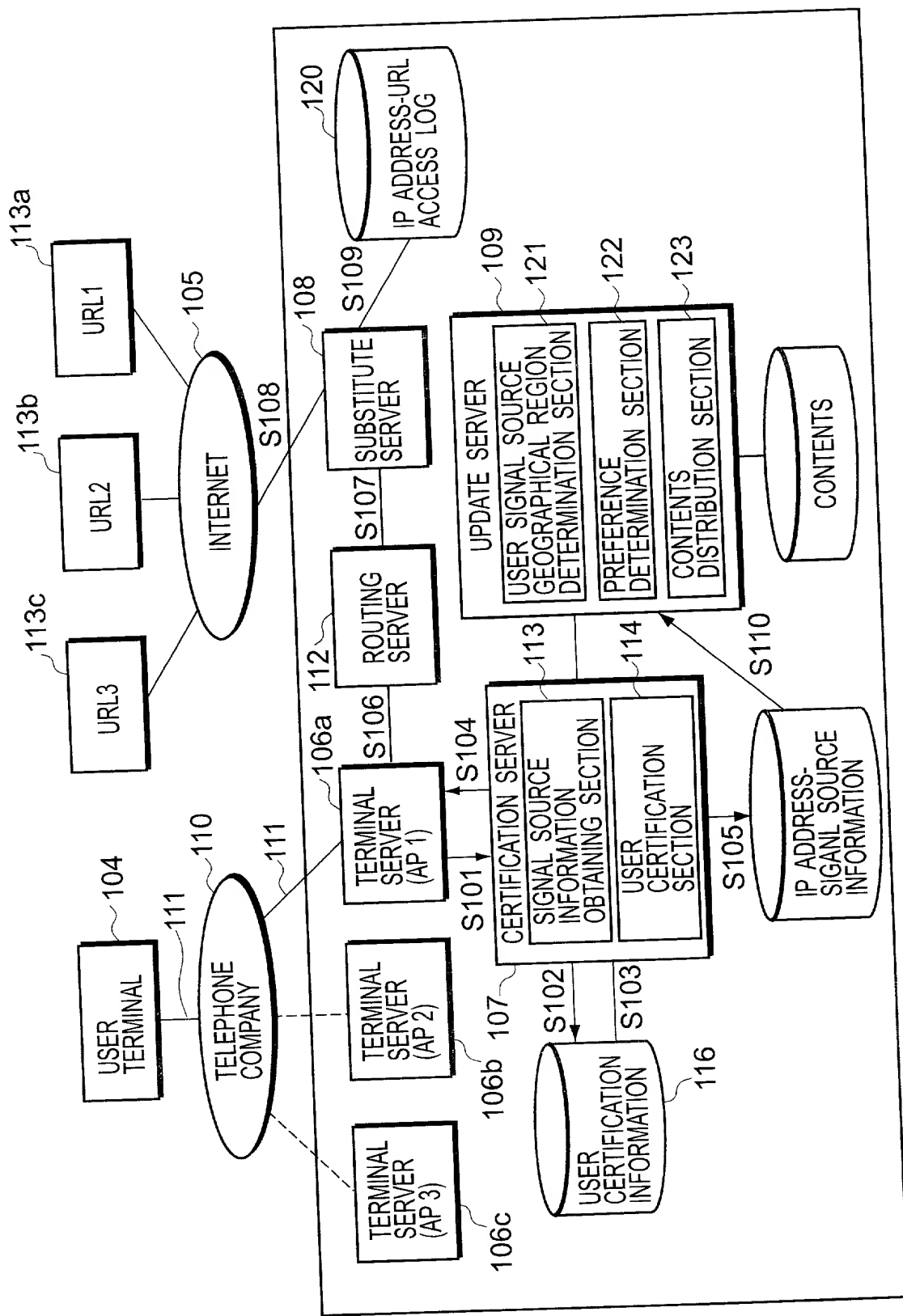


FIG. 12

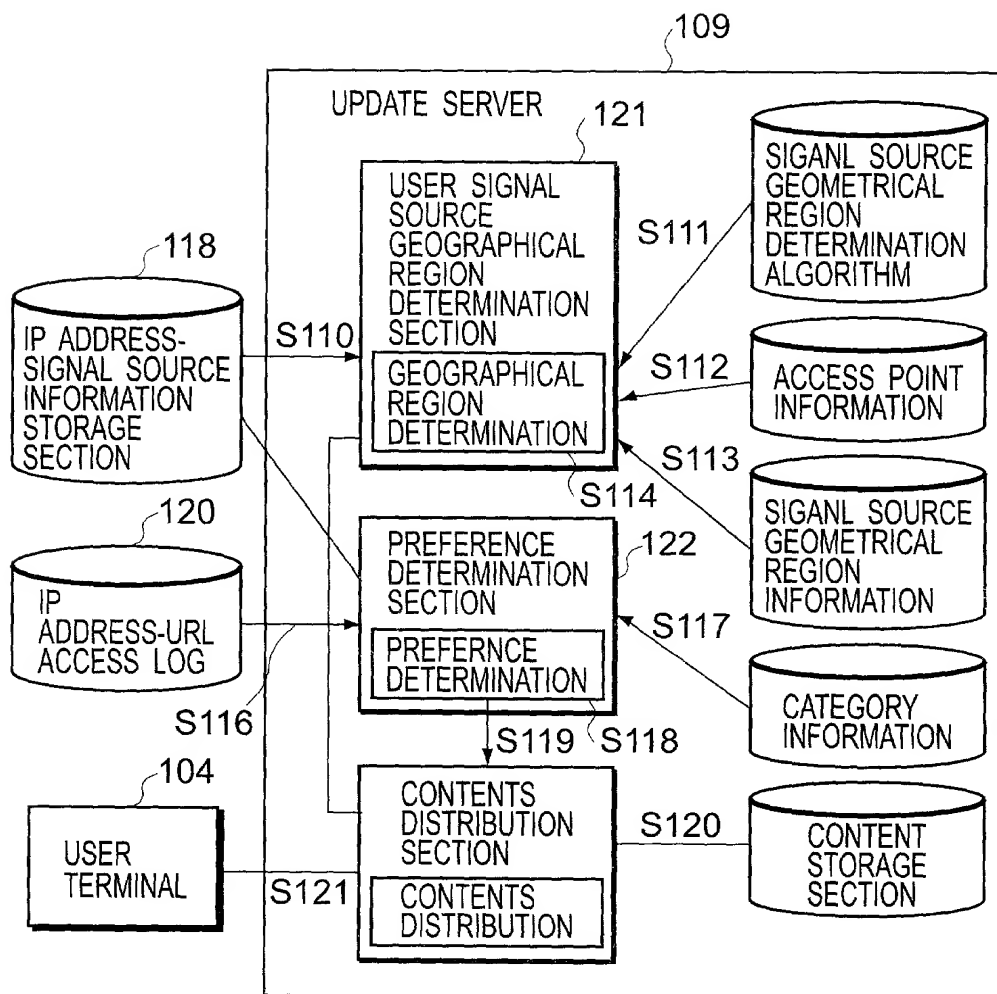


FIG. 13

ACCESS POINT INFORMATION

ACCESS POINT NAME	TELEPHONE NUMBER	LOCATION
AP1	03-111-1111	03 (TOKYO)
AP2	045-222-2222	045 (YOKOHAMA)
AP3	0120-3333-333	078 (KOBE)
. . .	. . . . .	. . . . .

FIG. 14

IP ADDRESS USAGE INFORMATION

USER	USER ID	IP ADDRESS	SIGANL SOURCE
A	1111	(IP 1)	045-222-2222
B	2222	(IP 2)	PUBLIC TELEPHONE
C	3333	(IP 3)	03-111-1111
. . .	. . . .	. . . .	. . . .

FIG. 15

SIGANL SOURCE GEOMETRICAL REGION  
DETERMINATION ALGORITHM

LINE NETWORK TYPE	ALGORITHM
REGULAR TELEPHONE	DETERMINE BASED ON THE SIGNAL SOURCE AREA CODE
PUBLIC TELEPHONE	DETERMINE BASED ON THE ACCESS POINT AREA CODE
. . .	. . . .

FIG. 16

SIGANL SOURCE GEOMETRICAL REGION INFORMATION

SIGNAL SOURCE OR ACCESS POINT AREA CODE AND EXCHANGE NUMBER	GEOMETRICAL REGION
045-222	YOKOHAMA-1
03-111	TOKYO-1
. . .	. . . .

FIG. 17

URL	CATEGORY
...	
URL 1	CATEGORY 1 (CARS)
...	
URL 2	CATEGORY 2 (TRAVEL)
...	
URL 3	CATEGORY 3 (SECURITIES)
...	

FIG. 18





